ENVIRONMENTAL CHEMISTS

Date of Report: 12/02/99 Date Received: 11/24/99

Project: Metro Self Monitor-PO# M63110

Date Samples Extracted: 11/24/99 Date Extracts Analyzed: 11/24/99

RESULTS FROM THE ANALYSIS OF THE WATER SAMPLE FOR CHROMIUM, COPPER, NICKEL, ZINC USING METHOD 6010

Samples Processed Using Method 3005A

Results Reported as mg/L (ppm)

Sample ID	<u>Chromium</u>	Copper	<u>Nickel</u>	Zinc
M63110	0.42	0.44	0.40	0.11
Method Blank	< 0.05	< 0.05	< 0.05	< 0.05

ENVIRONMENTAL CHEMISTS

Date of Report: 12/02/99 Date Received: 11/24/99

Project: Metro Self Monitor-PO# M63110

QUALITY ASSURANCE RESULTS FOR TOTAL METALS BY INDUCTIVELY COUPLED PLASMA (ICP) (METHOD 6010)

Laboratory Code: 911067-01 (Duplicate)

용가를 보다고 있었다. 사람들이 그리지 않는다.	Reporting Units Sample Result Duplicate Result Percent Difference Acceptance Criteria mg/L (ppm) 0.26 0.26 0 0-20 mg/L (ppm) 0.53 0.59 11 0-20 mg/L (ppm) 0.28 0.31 10 0-20					
	Reporting	Sample	Duplicat	e Percent	Acceptance	,
Analyte	Units	Result	Result	Difference	Criteria	
Chromium	mg/L (ppm)	0.26	0.26	0	0-20	7
Copper	mg/L (ppm)	0.53	0.59	11	0-20	
Nickel	mg/L (ppm)	0.28	0.31	10	0-20	
Zinc	mg/L (ppm)	0.14	0.17	19	0-20	

Laboratory Code: 911067-01 (Matrix Spike)

	Reporting	Spike	Sample	% Recov	ery % Recov	ery Acceptance)
Analyte	Units	Level	Result	MS	MSD	Criteria	RPD
Chromium	mg/L (ppm)	5	0.26	92	101	80-120	9
Copper	mg/L (ppm)	5	0.53	95	105	80-120	10
Nickel	mg/L (ppm)	10	0.28	91	98	80-120	7
Zinc	mg/L (ppm)	5	0.14	92	106	80-120	14

Laboratory Code: Laboratory Control Sample

	Reporting	Spike	% Recove	ery % Recove	ery Acceptance	е	
Analyte	Units	Level	LCS	LCSD	Criteria	RPI)
Chromium	mg/L (ppm)	5	105	107	80-120	2	
Copper	mg/L (ppm)	5	104	107	80-120	3	
Nickel	mg/L (ppm)	10	103	104	80-120	1	
Zinc	mg/L (ppm)	5	102	105	80-120	3	

FRIEDMAN & BRUYA, INC. 3012 16th Avenue West Seattle, WA 98119-2029 (206) 285-8282

DH 1124 99 CII

SAMPLE CHAIN OF CUSTODY

Send Report To: NAS	LAN CORRE	abeli		Comtan	. 6	evell A.		nc.)
	Hardone 80			Contac	<u></u>	enerc. 101	7020	<i>poo</i>
City, State, Zip <u>Se</u>	offle wo	28434						
Phone # 206-382-	ब्हिन	FAX #	G-908	382- <i>43</i> 09		Date 11-3	4-59	—
SITE NO.			BCT NAME			PURCHASE (ORDER	.#
7238		metro S	élf m	nitor	12	1 63110		-
SAMPLERS (signature)					······································	PROJECT LO	CATIO	N
A 156	2				320	0° 6+h	Ave	5,
REMARKS						APLE DISPOSAL		
						Dispose after : Return Sample	30 days	
						Call for Instru	ctions	
Sample #	Date/Time Sampled	Type of Sample	# of Jars	Lab Sample #			alyses uested	
m68110	1/24/19 10:00 an	Hro	/				n);	لمح
	·							
·								
							- ,	
			,			•	,	
					`			

SIGNATURE	lgq	INT NAME		COMPANY				
Relinguished by				Dez	7	Date	 T	Time
Received by:	- Crepate	A. Thorpa	-	New	بر	1/24/89		10:36 An
Relinquished by:	Katheri	ne Trafton	Fr	Bine		1/24/99		10:36 A
Received by:			 					
· · · · · · · · · · · · · · · · · · ·							l	

FORMS/COC

10/26/99

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D. Charlene Jensen, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S.

3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044 e-mail: fbi@isomedia.com

December 2, 1999

Gerry Thompson, Project Manager Alaskan Copper Works 628 South Hanford St. Seattle, WA 98134

Dear Mr. Thompson:

Included are the results from the testing of material submitted on November 24, 1999 from your Metro Self Monitor-PO# M63110 project. Any samples that may remain are currently scheduled for disposal in 30 days. If you would like us to return your samples or arrange for long term storage at our offices, please contact us as soon as possible.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.

Dianne C. Auct

Dianne C. Hurt Project Manager

Enclosures ACU1202R.DOC

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D. Charlene Jensen, M.S. Bradley T. Benson, B.S. Kurt Johnson, B.S.

3012 16th Avenue West Seattle, WA 98119-2029 TEL: (206) 285-8282 FAX: (206) 283-5044 e-mail: fbi@isomedia.com

December 2, 1999

DUPLICATE COPY

INVOICE #99ACU1202-2

Accounts Payable Alaskan Copper Works 628 South Hanford St. Seattle, WA 98134

RE: Project Metro Self Monitor Grab-PO# M63110: Results of testing requested by Gerry Thompson for material submitted on November 24, 1999.

1 water sample analyzed for Chromium, Copper, Nickel, and Zinc using Method 6010 @ \$80 per sample

\$ 80.00

Amount Due

\$ 80.00

PLEASE NOTE: As a convenience for our valued clients, we can accept credit cards (VISA, MasterCard or government purchasing cards) for payment on our invoices. Please contact our office if you would like to take advantage of this service.

FEDERAL TAX ID 7(b) (6)